

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. EEU-2016-03

In Re: 2016-2017 Demand Resources Plan Proceeding	
--	--

Order entered: 10/12/2017

**ORDER RE: DEVELOPMENT AND SUPPORT SERVICE BUDGETS, EVALUATION BUDGETS, OTHER
PROGRAM BUDGETS, FORECASTS OF EXPECTED SAVINGS, AND PERFORMANCE TARGETS**

I. INTRODUCTION

In this Order, the Vermont Public Utility Commission (“Commission”) approves the development and support service (“DSS”) budgets proposed by the state’s three energy efficiency utilities (“EEUs”) – Efficiency Vermont, the City of Burlington Electric Department (“BED”), and Vermont Gas Systems, Inc. (“VGS”). In addition, the Commission approves 20- and 10-year forecasts of expected savings, an evaluation plan and budgets, EEU Fiscal Agent and audit budgets, other program administrative budgets, and three-year targets for quantifiable performance indicators (“QPIs”) and minimum performance requirements.

The Commission initiated this proceeding to develop long-term Demand Resources Plans (“DRPs”) for Vermont’s three EEUs. A DRP is a set of year-by-year values for demand-side electricity, natural gas, and thermal energy and process fuels (“TEPF”) savings goals, and includes resource-acquisition and DSS budgets. The establishment of both short- and long-term EEU budgets and savings goals through a DRP allows the EEUs, Vermont utilities, and other market participants to incorporate efficiency savings into their planning and allows these entities to estimate the impacts of savings that will occur as a result of energy efficiency efforts that are funded by the energy efficiency charge (“EEC”). Vermont law requires EEU budgets funded via an EEC to be set at a level that would achieve “all reasonably available, cost-effective energy efficiency,” and describes specific objectives for the Commission to consider when setting EEU budgets.

In a July 7, 2017, Order, the Commission approved the resource-acquisition budgets proposed by the EEUs. The new EEU budget levels are expected to result in short-term rate relief in the EEC paid by ratepayers in those respective territories, while also delivering long-term savings to the state as a whole.

In this Order, we approve the 20-year forecast of savings for EEC-funded activities and the 10-year forecast of savings for TEPF-funded activities for the resource-acquisition budgets approved in the July 7th Order. The modeled expected savings demonstrate that the resource-acquisition budgets approved in the July 7th Order will result in significant long-term benefits to Vermont ratepayers.

In addition, for Efficiency Vermont, BED, and VGS we approve EEC-funded DSS budgets for three- and 20-year periods, and for Efficiency Vermont and BED we approve TEPF-funded DSS budgets for three- and ten-year periods. DSS activities may not directly result in efficiency savings but represent valuable aspects of energy efficiency service delivery and development, and include activities such as general administration, information technology, planning and reporting, and education and training. Because the analysis included DSS budget placeholders, the approved DSS budgets do not change the conclusions of the July 7th Order concerning immediate rate impacts and long-term bill impacts.

Further, in this Order, we approve budgets related to the oversight of the EEU program and other statewide efficiency programs supported by EEU funds. We approve the Vermont Department of Public Service's ("Department") Evaluation Plan and budgets that provide EEU evaluation, measurement, and verification activities for the 2018-2020 performance period. We also approve budgets related to the oversight services provided by the EEU Fiscal Agent, EEU Fund audits, and the independent audit of EEU savings claims and program cost-effectiveness. In addition, we approve the budgets for two programs administered with EEU funds: the statewide TEPF Information Clearinghouse and the property-assessed clean energy ("PACE") program.

Finally, in this Order, we determine three-year QPI targets for each EEU and the targets for minimum performance requirements for BED and VGS. The modeled expected savings approved in this Order inform the determination of these targets. These performance targets are intended to push the EEUs to innovate while responsibly using ratepayer resources to encourage adoption of efficient technologies.

Pursuant to Vermont Energy Investment Corporation's ("VEIC") Order of Appointment,¹ performance compensation is to be paid based on the attainment of three-year targets for QPIs and minimum performance requirements. In the next stage of the DRP proceeding, the performance compensation amount, the remaining QPI target levels, and the targets for the minimum performance requirements will be determined for Efficiency Vermont.

II. GLOSSARY OF ACRONYMS

BED	City of Burlington Electric Department
Commission	Vermont Public Utility Commission
Department	Vermont Department of Public Service
DRP	Demand Resources Plan
DSS	Development and Support Services
EEC	Energy Efficiency Charge
EEUs	Energy Efficiency Utilities
FCM	Forward Capacity Market
Mcf	Million Cubic Feet
MW	Megawatt
MWh	Megawatt Hour
PACE	Property Assessed Clean Energy
P&A Document	Process and Administration of an Energy Efficiency Utility Order of Appointment
QPI	Quantifiable Performance Indicator
RES	Renewable Energy Standard
RGGI	Regional Greenhouse Gas Initiative
TEPF	Thermal Energy and Process Fuels
TRB	Total Resource Benefits
VEIC	Vermont Energy Investment Corporation
VGS	Vermont Gas Systems, Inc.

¹ VEIC serves as Vermont's statewide EEU, known as Efficiency Vermont, under an Order of Appointment issued by the Commission on 2/12/16, in Docket 8455.

III. BACKGROUND AND RELEVANT PROCEDURAL HISTORY

In 2010, as part of the Commission's modification of the EEU program structure, the Commission approved a document titled Process and Administration of an Energy Efficiency Utility Order of Appointment ("P&A Document") that describes the overall EEU program structure.² The P&A Document describes the process to be followed in developing a DRP as well as a DRP's contents.

Pursuant to the P&A Document, the DRP proceeding shall: (1) be a non-contested case proceeding before the Commission involving the EEUs that results in a set of long-term, EEU-specific assumptions pursuant to which each EEU shall operate; (2) delineate the budgets, modeled savings, and QPIs for each EEU, including both resource-acquisition and DSS budgets; (3) to the extent possible, include consideration of the effects on overall DRP budgets and QPIs of geographically targeted energy efficiency budgets and services; (4) delineate the compensation structure, if any, of EEUs; (5) delineate budgets for the Department evaluation of EEUs; and (6) delineate budgets for the EEU Fiscal Agent, EEU Fund audit, independent audit of EEU savings claims and program cost-effectiveness, the statewide TEPF Information Clearinghouse, and other items funded by the EEC and TEPF funding sources, as applicable. The DRP proceeding may also include consideration of the potential of cost-effective technologies that increase the use of electricity or natural gas while decreasing overall energy consumption.

In June of 2016, we initiated this proceeding to develop the third DRPs for VEIC and BED, and the first DRP for VGS. This DRP proceeding has been guided by the objectives and criteria of 30 V.S.A. §§ 218c, 209(d), 209(e), 202(a), and other applicable sections of Vermont statutes and prior Commission orders. The process has not used contested-case procedures, and all interested persons have been afforded the opportunity to participate through workshops and written filings. Because this process was not a formal docket, there were no parties and no deadlines for intervention. In this Order, we use the term "participants" to refer to the

² *Investigation into Petition Filed by Vermont Department of Public Service Re: Energy Efficiency Utility Structure*, Docket 7466, Order of 12/20/10. The P&A Document has been modified in subsequent proceedings. The latest revision was approved in Docket 8455, Order of 2/12/16.

individuals and entities who participated in some manner in this process, regardless of the extent to which they attended the workshops.

On July 7, 2017, after reviewing EEU resource-acquisition modeling and an analysis of rate and bill impacts, the Commission issued an Order approving the resource-acquisition budgets proposed by the EEUs, the assumptions for final expected savings modeling, and the QPI and minimum performance requirements, including weighting factors, for each EEU.

On July 28, 2017, participants filed final resource-acquisition scenario model results, QPI and minimum performance requirement targets, proposed DSS plans and budgets, proposed evaluation plan and budgets, and proposals for other program budgets.

On August 1, 2017, a workshop was convened to discuss the modeling of expected savings, the proposed DSS budgets, the evaluation plan and budgets, other program budgets, and targets for QPIs and minimum performance requirements.

On August 15, 2017, participants filed comments following the workshop discussions.

On August, 23, 2017, VEIC filed supplemental comments.

On September 1, 2017, the Department filed supplemental comments.

On September 25, 2017, BED filed revised DSS budgets and QPI targets.

IV. BED'S TEPF RESOURCE ACQUISITION BUDGET

In the July 7th Order, the Commission approved an initial TEPF budget for BED for the 2018-2020 performance period that allocated \$315,875 for TEPF resource acquisition (\$103,300 in 2018, \$105,228 in 2019, and \$107,347 in 2020). This allocated amount was significantly below BED's TEPF revenue forecast for the period of \$1,716,164 (\$637,607 in 2018, \$617,940 in 2019, and \$460,617 in 2020). Under the initial approved budget, the total unallocated amount of TEPF funds for the period is \$1,232,272 (after deducting the initial resource-acquisition, DSS, and evaluation budget amounts from the forecast).³ The July 7th Order granted BED additional time to propose programs in which to invest the remainder of the unallocated TEPF funds or some portion thereof.

³ The July 7th Order indicated a value of \$1,377,055, which did not include the deduction for the Department's evaluation budget.

BED indicated that it is in the process of developing two new TEPF programs that it hopes to implement during the 2018-2020 performance period. BED anticipated it will be able to invest the remainder of the unallocated TEPF funds through these two additional programs. BED requested that the Commission approve its TEPF resource-acquisition budgets with a reserve amount (the unallocated funds) so that the total budget is \$1,548,147 for the 2018-2020 performance period. BED is seeking additional flexibility to submit program plans in the future to support the investment of the reserve amount and to amend its TEPF savings goals to reflect the increased investment.

Discussion

Because of the limited number of cost-effective TEPF opportunities in its service territory due to its overlap with VGS, BED revenue generated from the FCM and RGGI auctions has typically exceeded BED's expenditures on TEPF efficiency measures. BED's budget proposal represents a reasonable approach to ensure that these FCM and RGGI revenues are invested in efficiency projects that directly benefit BED customers. Accordingly, we approve BED's TEPF resource-acquisition budget proposal of \$1,548,147 for the 2018-2020 performance period. BED shall provide an update on its new TEPF programs to the Commission in its 2018 annual plan filing.

We approve the annual TEPF resource-acquisition budgets for BED as set forth in the table below.

BED TEPF-Funded Resource Acquisition Budgets			
	2018	2019	2020
Allocated TEPF budget	\$103,300	\$105,228	\$107,347
Reserve TEPF budget	\$467,801	\$464,311	\$300,160
Total	\$571,101	\$569,539	\$407,507

V. RESOURCE ACQUISITION EXPECTED SAVINGS

Resource-acquisition activities are those that lead directly to measurable savings, and represent the largest component of each EEU's annual efficiency budget. The EEUs used the

resource-acquisition budgets approved in the July 7th Order to model expected savings over a 20-year horizon for EEC-funded activities and over a 10-year horizon for TEPF-funded activities.

The modeled expected savings will inform the establishment of QPI targets for the 2018-2020 performance period. In addition, the expected savings serve as a planning tool to assess the effect of future efficiency programs and measures. In particular, the expected savings inform other Vermont utilities' planning efforts with regard to power purchases and transmission and distribution system investments.

BED, VEIC, and VGS provided the modeled expected savings for the resource-acquisition budgets approved in the July 7th Order. BED and VEIC provided a 20-year forecast of annual expected MWh and MW savings for the approved EEC-funded budgets and a 10-year forecast of annual expected MMBtu savings for the approved TEPF-funded budgets. VGS provided a 20-year forecast of annual expected Mcf savings for the approved EEC-funded budgets.

The Department agreed with the expected savings forecasts provided by BED, VEIC, and VGS. No other participant filed comments on the expected savings forecasts.

Discussion

We approve the 20-year and 10-year forecasts of expected savings filed by BED, VEIC, and VGS. The approved forecasts are contained in Appendix A of this Order. The modeling of expected savings incorporated the resource-acquisition budgets and the policy and technical assumptions approved by the Commission in this proceeding. The modeled expected savings demonstrate that the resource-acquisition budgets approved in the July 7th Order will result in significant long-term benefits to Vermont ratepayers.

VI. DSS BUDGETS

The P&A Document and the EEU Orders of Appointment provide that the DRP process shall include consideration of appropriate DSS budgets for the EEUs. Specifically, the P&A Document requires the EEUs to propose EEC-funded DSS budgets for three- and 20-year

periods and TEPF-funded DSS budgets for three- and ten-year periods, as applicable.⁴ DSS activities may not directly result in energy efficiency savings but represent valuable aspects of service delivery and development. DSS budgets include activities such as general administration, information technology, planning and reporting, and education and training.

A. DSS Budgets for BED

BED's DSS budget proposal included activities supported by EEC and TEPF funds. For the 2018-2020 performance period, BED proposed a total EEC-funded DSS budget of \$705,390 and a total TEPF-funded DSS budget of \$31,955. The proposed DSS budgets include spending in the following seven categories: (1) education and training; (2) applied research and demonstration; (3) planning and reporting; (4) evaluation; (5) policy and public affairs; (6) information technology; and (7) general administration. BED provided budget assumptions and narratives to support its allocation of costs among DSS budget items. BED also proposed EEC-funded DSS budgets for the 20-year planning cycle (2018-2037) and TEPF-funded budgets for the 10-year planning cycle (2018-2027).

The Department supported BED's DSS budget proposal. No other participant filed comments on BED's DSS budget proposal.

Discussion

Based on our review of BED's budget assumptions and narratives, we find the proposed DSS budget assumptions and funding levels to be reasonable. The proposed DSS activities represent valuable aspects of service delivery and development even though the activities may not directly result in energy efficiency savings. The proposed DSS budgets reflect the level of funding needed to support the resource-acquisition activities and budgets approved for the 2018-2020 performance period and are consistent with the level of DSS spending in past performance periods. In order to monitor these activities during the 2018-2020 performance period, we direct BED to track spending by category.

⁴ Pursuant to 30 V.S.A. § 209(e)(1), TEPF funds derived from the FCM and Regional Greenhouse Gas Initiative ("RGGI") must be used to provide efficiency services to unregulated fuel customers in BED's and Efficiency Vermont's service territories. EEU services in VGS's territory are only EEC funded.

We determine that BED's total three-year budget for DSS activities during the 2018-2020 performance period shall be \$705,390 for EEC-funded activities and \$31,955 for TEPF-funded activities. We approve the annual DSS budgets by category as set forth in the tables below.

BED EEC-Funded DSS Budgets by Category			
	2018	2019	2020
Education and Training	\$35,690	\$36,500	\$36,500
Applied Research and Development	\$11,620	\$11,800	\$11,800
Planning and Reporting	\$57,270	\$58,500	\$58,500
Evaluation	\$19,090	\$19,500	\$19,500
Policy and Public Affairs	\$10,873	\$11,100	\$11,100
Information Technology	\$12,108	\$14,800	\$14,800
General Administration	\$45,027	\$51,361	\$51,361
Total	\$191,677	\$203,561	\$203,561

BED TEPF-Funded DSS Budgets by Category			
	2018	2019	2020
Education and Training	\$3,400	\$3,500	\$3,600
Applied Research and Development	\$750	\$800	\$800
Planning and Reporting	\$1,105	\$1,100	\$1,100
Evaluation	\$750	\$800	\$800
Policy and Public Affairs	\$1,000	\$1,000	\$1,000
Information Technology	\$750	\$800	\$800
General Administration	\$2,600	\$2,700	\$2,800
Total	\$10,355	\$10,700	\$10,900

For planning purposes, the remainder of BED's proposed 20-year EEC-funded DSS budgets remain level in real dollars over the 2020-2037 period, and the remainder of the 10-year TEPF-funded DSS budgets remain level in real dollars over the 2020-2027 period. We conclude that the 10-year and 20-year DSS budgets proposed by BED are reasonable. The DSS budgets for the 2018-2037 period are contained in Appendix B to this Order.

B. DSS Budgets for Efficiency Vermont

Efficiency Vermont's DSS budget proposal included activities supported by EEC and TEPF funds. For the 2018-2020 performance period, VEIC proposed a total EEC-funded DSS budget of \$11,464,873 and a total TEPF-funded DSS budget of \$2,348,227. The proposed DSS budgets include spending in the following six categories: (1) education and training; (2) applied research and development; (3) planning and reporting; (4) evaluation; (5) administration and regulatory affairs; and (6) information technology. VEIC provided budget assumptions and narratives to support its allocation of costs among DSS budget items. VEIC also proposed EEC-funded DSS budgets for the 20-year planning cycle (2018-2037) and TEPF-funded budgets for the 10-year planning cycle (2018-2027).

The Department supported the TEPF-funded DSS budget proposal, but did not fully support the EEC-funded budget proposal. The Department recommended reducing VEIC's proposed DSS budget by \$208,900. No other participant filed comments on VEIC's DSS budget proposal.

Specifically, the Department recommended that the education and training category of VEIC's DSS budget be reduced by \$156,700, and the planning and reporting category by \$52,250. The Department recommended decreases in these categories because it believes that some of the activities described in VEIC's DSS budget narrative appear to go beyond Efficiency Vermont's "explicit responsibilities in operating the EEU and/or provide limited, if any, direct value to Vermont ratepayers." For example, the Department contended that brand recognition promotion and focus on Efficiency Vermont's regional and national presence are less necessary now than may have been warranted in earlier years. In addition, the Department raised concerns that the DSS budgets included Efficiency Vermont's coordination with the distribution utilities on the implementation of the Renewable Energy Standard ("RES") requirements pursuant to 30 V.S.A. § 8005. The Department maintained that this work should be compensated by the distribution utilities rather than with EEC and TEPF funds.

As an alternative proposal in the event the Commission agrees that the DSS budget should be reduced but is uncertain whether the categories recommended for decrease by the Department are appropriate, the Department recommended the \$208,900 reduction be applied proportionately across all DSS categories.

The Department contended that its DSS budget recommendations will help keep downward pressure on the overall EEC rate for Efficiency Vermont customers. The Department maintained that DSS obligations can likely be fulfilled with less spending if Efficiency Vermont adopts innovative and alternative approaches to implement these obligations.

VEIC maintained that the tasks provided for in its DSS budget are reasonable and necessary for the effective delivery of EEU services and fulfill specific requirements identified in its Order of Appointment and the P&A Document. VEIC contended that its proposed DSS budget was developed in conjunction with activities called for under its approved resource-acquisition budget, and that the costs are reasonable and appropriate. With regard to the education and training category of the DSS budget, VEIC asserted that brand recognition is important for building the base of customers who will take advantage of Efficiency Vermont's offers and services. In addition, VEIC maintained that other reductions in education funding would reduce necessary services. With regard to the planning and reporting category, VEIC maintained that the P&A Document includes the requirement that Efficiency Vermont coordinate with the distribution utilities on the implementation of RES compliance efforts.

Discussion

Based on our review of Efficiency Vermont's budget assumptions and narratives, we find the proposed DSS budget assumptions and funding levels to be reasonable. The proposed DSS activities represent valuable aspects of service delivery and development even though the activities may not directly result in energy efficiency savings. The proposed DSS budgets reflect the level of funding needed to support the resource-acquisition activities and budgets approved for the 2018-2020 performance period.

The EEC-funded DSS budgets proposed for Efficiency Vermont represent an approximately 9% decrease from the 2015-2017 performance period and represent a greater decrease for the same period than the reduction in the approved resource-acquisition budgets. The approved resource-acquisition budgets represented a 5% reduction in the 2018 budget (relative to 2017) followed by flat budgets for 2019 and 2020. The proposed DSS budgets do not change the conclusions of the July 7th Order concerning immediate rate impacts and long-term bill impacts. Customers are expected to have a noticeable EEC rate reduction in 2018 followed

by a modest rate increase in 2019 and 2020, while customers' bills are estimated to decrease by 6.2% over a 20-year period. The proposed DSS budgets will contribute to Efficiency Vermont's ability to provide significant long-term benefits to Vermont ratepayers, and will enable Efficiency Vermont to acquire all reasonably available, cost-effective energy efficiency.

While we agree with the Department that Efficiency Vermont should strive for innovation when implementing programs, the Department has not sufficiently demonstrated that its own budget recommendations are appropriate or that Efficiency Vermont can make further reductions in its DSS budgets through alternative or innovative program implementation. Further, the activities identified in the DSS budgets are consistent with the requirements identified in VEIC's Order of Appointment and the P&A Document. With regard to the education and training category, we remain concerned that the Department's proposed reductions may result in a reduced ability for Efficiency Vermont to deliver energy-efficiency services. With regard to planning and reporting, Section V(10)(D) of the P&A Document does include the requirement that Efficiency Vermont coordinate with the distribution utilities on the implementation of RES compliance efforts. VEIC has allocated an appropriate budget level to support these activities. We note that these RES activities include general coordination and planning activities, such as coordination on annual plan development. These activities do not include arrangements under which VEIC assists in the implementation of a distribution utility's RES compliance efforts. In those instances, we expect VEIC to seek direct compensation from the distribution utility.

We determine that Efficiency Vermont's total three-year budget for DSS activities during the 2018-2020 performance period shall be \$11,464,873 for EEC-funded activities and \$2,348,227 for TEPF-funded activities. We approve the annual DSS budgets by category as set forth in the tables below. In order to monitor these activities during the 2018-2020 performance period, we direct Efficiency Vermont to track spending by category.

Efficiency Vermont EEC-Funded DSS Budgets by Category			
	2018	2019	2020
Education and Training	\$805,100	\$771,983	\$756,545
Applied Research and Development	\$352,750	\$329,095	\$305,523
Planning and Reporting	\$355,240	\$514,185	\$542,488

Evaluation	\$688,900	\$651,550	\$639,183
Administrative and Regulatory Affairs	\$481,400	\$442,556	\$433,675
Information Technology	\$1,157,850	\$1,128,800	\$1,108,050
Total	\$3,841,240	\$3,838,169	\$3,785,464

Efficiency Vermont TEPF-Funded DSS Budgets by Category			
	2018	2019	2020
Education and Training	\$164,900	\$158,117	\$154,955
Applied Research and Development	\$72,250	\$67,405	\$62,577
Planning and Reporting	\$72,760	\$105,315	\$111,112
Evaluation	\$141,100	\$133,450	\$130,917
Administrative and Regulatory Affairs	\$98,600	\$90,644	\$88,825
Information Technology	\$237,150	\$231,200	\$226,950
Total	\$786,760	\$786,131	\$775,336

For planning purposes, the remainder of VEIC's proposed 20-year EEC-funded and 10-year TEPF-funded DSS budgets adjust for growth in three-year cycles starting in 2021. We conclude that the 10-year and 20-year DSS budgets proposed by VEIC are reasonable. The DSS budgets for the 2018-2037 period are contained in Appendix B to this Order.

C. DSS Budgets for VGS

VGS's DSS budget proposal included activities funded by the natural gas EEC. For the 2018-2020 performance period, VGS proposed a total DSS budget of \$796,428. The proposed DSS budgets include spending in the following seven categories: (1) education and training; (2) applied research and demonstration; (3) planning and reporting; (4) evaluation; (5) policy and public affairs; (6) information technology; and (7) general administration. VGS provided budget assumptions and narratives to support its allocation of costs among DSS budget items. VGS also proposed DSS budgets for the 20-year planning cycle (2018-2037).

The Department supported VGS's DSS budget proposal. No other participant filed comments on VGS's DSS budget proposal.

Discussion

Based on our review of VGS's budget assumptions and narratives, we find the proposed DSS budget assumptions and funding levels to be reasonable. The proposed DSS activities represent valuable aspects of service delivery and development even though the activities may not directly result in energy efficiency savings. The proposed DSS budgets reflect the level of funding needed to support the resource-acquisition activities and budgets approved for the 2018-2020 performance period and are consistent with the level of DSS spending in VGS's 2016-2017 transition period.⁵ In order to monitor these activities during the 2018-2020 performance period, we direct VGS to track spending by category.

We determine that VGS's total three-year budget for DSS activities during the 2018-2020 performance period shall be \$796,428. We approve the annual DSS budgets by category as set forth in the table below.

VGS EEC-Funded DSS Budgets by Category			
	2018	2019	2020
Education and Training	\$50,029	\$55,309	\$55,592
Applied Research and Demonstration	\$10,000	\$10,100	\$10,201
Planning and Reporting	\$60,000	\$60,600	\$61,206
Evaluation	\$29,943	\$30,242	\$30,545
Policy and Public Affairs	\$16,785	\$16,953	\$17,122
Information Technology	\$48,000	\$48,480	\$48,965
General Administration	\$45,000	\$45,450	\$45,905
Total	\$259,757	\$267,135	\$269,536

For planning purposes, the remainder of VGS's proposed 20-year DSS budgets remain level in real dollars over the 2020-2037 period. We conclude that the 20-year DSS budgets proposed by VGS are reasonable. The DSS budgets for the 2018-2037 period are contained in Appendix B to this Order.

⁵ The Commission appointed VGS to provide natural gas EEU services in 2015, and established transition period budgets for the 2016-2017 period. *See Investigation into the Appointment of an Entity to Provide Natural Gas Efficiency Services*, Docket 7676, Order of 4/17/15; *In Re: Vermont Gas Systems, Inc. Transition Period Plan*, EEU-2015-02, Order of 11/23/15.

VII. DEPARTMENT EVALUATION PLAN AND BUDGET

The P&A Document states that the DRP shall include budgets to support the Department's evaluation of the EEUs. The Department's proposed Evaluation Plan includes activities funded by both EEC and TEPF funds.

For the 2018-2020 performance period, the Department proposes an EEC-funded evaluation budget of \$3,748,200, a TEPF-funded evaluation budget of \$454,300, and an FCM-funded evaluation budget of \$1,820,700.⁶ The Department provided budget assumptions and narratives to support its evaluation activities. The Evaluation Plan includes evaluation, measurement, and verification of EEU activities provided by BED, Efficiency Vermont, and VGS. The Evaluation Plan also includes evaluation, measurement, and verification activities associated with participation by Efficiency Vermont and BED in the FCM.

Currently, Efficiency Vermont's entire portfolio of savings is measured and verified annually by the Department. In a separate process, a portion of Efficiency Vermont's savings portfolio is measured and verified as part of the FCM verification process.⁷ The Department proposed to combine these savings verification processes as a way to reduce evaluation costs while also increasing the level of rigor in the overall evaluation of the savings claim being measured. This has already occurred for BED evaluation activities. The Department started the process to combine these verification activities during the 2015-2017 performance period. The Department requested additional time to work with the EEUs to identify the necessary changes and costs associated with combining the verification processes prior to making a final recommendation for the merger of the two processes. In order to determine a clear process and timeline for this effort, the Department recommended a planning meeting with Commission staff and Efficiency Vermont.

VEIC supported the proposal to combine the savings verification processes. VEIC supported the establishment of a clear process and timeline for the resolution of how, when, and by what means the two verification processes will be merged.

No other participant filed comments on the Department's Evaluation Plan or budgets.

⁶ Pursuant to the Commission's Order of May 25, 2011, in EEU-2010-06, the Department is responsible for conducting FCM evaluation activities that are required by ISO-New England.

⁷ Efficiency Vermont savings are bid into the FCM three years in advance of the acquired savings, and thus often do not match the actual annual savings achieved by Efficiency Vermont.

Discussion

We find the Department's proposed Evaluation Plan to be a reasonable approach. The Department has identified areas of cost savings that have resulted in a proposed budget that is approximately 10% less than the budget for the 2015-2017 performance period. The proposed Evaluation Plan and budget ensure that the appropriate rigor is brought to bear on EEU evaluation, measurement, and verification activities for the 2018-2020 performance period. Accordingly, the Evaluation Plan and associated three-year budget of \$6,059,280 are approved.

Because EEC rates are set separately for BED, Efficiency Vermont, and VGS customers, the Department's EEC-funded evaluation costs are determined for each EEU. Some evaluation activities are specific to each EEU (e.g., annual savings verification) and other activities are shared proportionally among the EEUs (e.g., market assessments and potential studies). For the shared activities, the Department recommends the EEC-funded budget be shared proportionally based on each EEU's share of the total resource-acquisition budgets. We accept the Department's recommendation and approve the annual evaluation budgets by EEU and category as set forth in the table below.

Evaluation Budgets by EEU and Category			
	2018	2019	2020
<i>EEC-Funded</i>			
Efficiency Vermont	\$754,600	\$919,000	\$1,269,800
BED	\$41,000	\$53,000	\$73,200
VGS	\$212,500	\$209,300	\$251,800
<i>TEPF-Funded</i>			
FCM	\$608,200	\$605,500	\$607,000
RGGI	\$31,500	\$175,500	\$247,300

We agree that combining the annual savings verification conducted by the Department with the FCM verification process will reduce evaluation costs while also increasing the level of rigor in the overall savings evaluation. As part of this DRP proceeding, we direct Commission staff to conduct an additional workshop to discuss the process and timeline for the merging of the

annual and FCM savings verification processes. We expect that workshop participants will develop a recommended process and timeline that allow for the merging of these verification processes before the end of the 2018-2020 performance period.

VIII. FISCAL AGENT AND RELATED COSTS

The EEU Fiscal Agent is responsible for administering and managing the EEU Fund under a contract with the Commission. The Department's budget recommendations included annual amounts for the costs of the Fiscal Agent, including annual audits of the EEU Fund. In addition, the Department's budget recommendations include annual amounts for the independent audit of the EEU program's savings and cost-effectiveness.⁸ For the 2018-2020 performance period, the Department proposes an EEC-funded budget of \$126,716 for the Fiscal Agent and annual audits, and \$73,581 for the independent audit.

No participants filed comments on the Department's recommended budgets for the Fiscal Agent or for the independent audit of the EEU Fund.

Discussion

We find the recommendations for the budgets of the Fiscal Agent and for the independent audit of the EEU program's savings and cost-effectiveness to be reasonable estimates of the cost of these services. However, with regard to the EEU Fund audit, based on review of the previous performance period, we find that the Department's proposal underestimates the costs associated with the audit by approximately \$14,000 annually. Accordingly, we are approving additional monies to adjust this annual budget item. With the adjustment for the EEU Fund audit, these budget estimates are consistent with the 2015-2017 performance period. Because EEC rates are set separately for BED, Efficiency Vermont, and VGS customers, the budgets are determined by EEU.

We approve the annual Fiscal Agent and audit budgets by EEU as set forth in the table below. These budgets include the adjustment for the costs associated with the EEU Fund audit.

⁸ Pursuant to 30 V.S.A. 209(f)(12), every three years an independent auditor shall verify the reported energy and capacity savings and cost-effectiveness of programs delivered by any entity appointed by the Commission to deliver energy efficiency programs.

Fiscal Agent and Audit Budgets by EEU			
	2018	2019	2020
<i>Fiscal Agent and Annual EEU Fund Audits</i>			
Efficiency Vermont	\$45,814	\$46,730	\$47,664
BED	\$2,487	\$2,537	\$2,588
VGS	\$7,399	\$7,547	\$7,698
Total	\$55,700	\$56,814	\$57,950
<i>Independent Audit</i>			
Efficiency Vermont	\$20,433	\$20,776	\$21,191
BED	\$1,110	\$1,198	\$1,222
VGS	\$2,500	\$2,550	\$2,601
Total	\$24,043	\$24,524	\$25,014

IX. OTHER EEU PROGRAMS

Pursuant to 30 V.S.A. § 209(g)(2), the Commission established a framework for a statewide TEPF Information Clearinghouse for access to, and effective coordination across, TEPF efficiency services.⁹ The Commission determined that the Department would be the entity responsible for administration of the clearinghouse. In addition, the Commission determined that the costs of the TEPF Information Clearinghouse shall be allocated between the unregulated and regulated fuel sectors such that 69% of such costs shall be paid from TEPF funds available for unregulated fuel efficiency services under 30 V.S.A. § 209(e)(1), and 31% of such costs shall be paid from funds available for regulated natural gas efficiency services under 30 V.S.A. § 209(d)(3).¹⁰

For the 2018-2020 performance period, the Department proposed a TEPF-funded budget of \$99,360 and a natural gas EEC-funded budget of \$44,640 to maintain the TEPF Information Clearinghouse.

⁹ *Order Re Framework for a Thermal Energy and Process Fuels Statewide Information Clearinghouse*, EEU-2013-10, Order of 10/8/2015.

¹⁰ *Order Re Allocation of TEPF Information Clearinghouse Costs*, EEU-2013-10, Order of 10/16/15.

Pursuant to 24 V.S.A. § 3270, a PACE fund is established and administered by the State Treasurer. As required by 24 V.S.A. § 3270(c)(1)(A)(i), no more than \$50,000 per year of TEPF funds shall be available to the State Treasurer to be called upon as a loan loss reserve fund for the PACE program.

For the 2018-2020 performance period, the Department proposed a TEPF-funded budget of \$150,000 to maintain the PACE program.

Discussion

We find the recommendation for the TEPF Information Clearinghouse budgets to be a reasonable estimate of the annual costs to maintain the statewide clearinghouse. These budgets are consistent with the framework established by the Commission for the TEPF Information Clearinghouse.

We find the recommendation for the PACE budgets to be reasonable and consistent with the statutory requirements of 24 V.S.A. § 3270. We direct that these funds shall be held in the EEU Fund unless drawn upon by the State Treasurer. Any funds not drawn by the State Treasurer shall be made immediately available for the TEPF program implementation. In addition, we request that the Department discuss with the State Treasurer whether future set-asides are required based on the lack of activity in the State PACE Reserve Fund.

We approve the annual TEPF Information Clearinghouse and PACE budgets as set forth in the table below.

TEPF Information Clearinghouse and PACE Budgets			
	2018	2019	2020
TEPF Information Clearinghouse			
TEPF-funded	\$33,120	\$33,120	\$33,120
Natural Gas EEC-funded	\$14,880	\$14,880	\$14,880
PACE Reserve	\$50,000	\$50,000	\$50,000

X. QPI TARGETS

In the July 7th Order, the Commission determined the specific QPIs, including weighting factors, and minimum performance requirements for which targets should be developed in the

following stages of the DRP proceeding. In this stage of the DRP proceeding, we determine three-year QPI targets for each EEU. In addition, in this stage, we determine the targets for minimum performance requirements for BED and VGS. As discussed above, the modeled expected savings inform the establishment of QPI targets.

A. QPI Targets for Efficiency Vermont

Pursuant to VEIC's Order of Appointment, performance compensation is to be paid based on the attainment of three-year targets for QPIs and minimum performance requirements. QPIs have a positive performance award associated with them and include a weighting factor that determines the amount of possible compensation for achieving each QPI target. Failure to meet minimum performance requirements results in the forfeiture of the opportunity to earn some or all of the performance award that could be earned for meeting QPI targets. Each QPI is divided into three target levels: minimum, 100%, and "super stretch." Each QPI has a possible performance award that starts by achieving the minimum target level and continues to scale upward as the 100% and "super stretch" targets are achieved.

In this stage of the DRP Proceeding, the "super-stretch" QPI targets will be determined for Efficiency Vermont. In the next stage of the DRP proceeding, the performance compensation amount, the remaining QPI target levels, and the targets for the minimum performance requirements will be determined.

For Efficiency Vermont, the modeled expected savings inform the establishment of "super stretch" QPI targets. Based on the modeled expected savings, VEIC proposed electric-efficiency and TEPF "super-stretch" QPI targets for the 2018-2020 performance period. For electric-efficiency activities, the "super-stretch" targets include the following QPIs: (a) QPI 1 - total resource benefits; (b) QPI 2 - annual incremental MWh savings; (c) QPI 3- summer peak demand savings; (d) QPI 4 - winter peak demand savings; and (e) QPI 5 - lifetime MWh savings. For TEPF activities, the "super-stretch" target include QPI 1 - annual incremental MMBtu savings.

TEPF activities include an additional QPI with a positive performance award: QPI 2 - residential single family comprehensiveness. This QPI target is not a direct output of the

modeled expected savings. Instead, the QPI target is established based on the percentage of comprehensive projects completed during a performance period. VEIC and the Department plan to propose this QPI target in the next stage of the DRP proceeding.

The Department supported the proposed “super-stretch” QPI targets. No other participant filed comments on these QPI targets.

Discussion

We find that the proposed “super-stretch” QPI targets represent a reasonable level of savings that can be expected over the 2018-2020 performance period given the modeled expected savings of the resource-acquisition budgets approved in the July 7th Order. The modeling of the electric expected savings assumed that 3.8% of the resource-acquisition budget would maximize lifetime MWh savings and assumed that the remainder of the 2018-2020 portfolio is well balanced and offers markets, programs, and measures that provide customer benefits and that contribute to many policy and performance objectives. Although the source of revenue for TEPF budgets is forecast to be highly variable across the 2018-2020 performance period, the modeling of the TEPF expected savings assumed a consistent level of resource-acquisition funding to allow for a more effective program delivery. The proposed electric and TEPF “super-stretch” targets are intended to push Efficiency Vermont to innovate while responsibly using ratepayer resources to encourage adoption of efficient technologies.

For the 2018-2020 performance period, we approve the following “super-stretch” QPI targets for Efficiency Vermont as set forth in the table below.

“Super-Stretch” QPI Targets for Efficiency Vermont		
QPI #	QPI Description	2018-2020 Total
<i>Electric QPIs</i>		
QPI 1	Total resource benefits	\$333,837,900
QPI 2	Annual incremental MWh savings	375,100 MWh
QPI 3	Cumulative summer peak demand savings	48,200 kW
QPI 4	Cumulative winter peak demand savings	65,500 kW
QPI 5	Lifetime MWh savings	3,759,300 MWh
<i>TEPF QPIs</i>		

QPI 1	Annual incremental MMBtu savings	409,200 MMBtu
-------	----------------------------------	---------------

B. BED Targets for QPIs and Minimum Performance Requirements

For BED, we are establishing targets for QPI and minimum performance requirements. BED does not have a monetary performance award associated with meeting its QPI targets. The corresponding QPI weighting factors (approved in the previous stage of the DRP proceeding) and the minimum performance requirements help direct the focus of BED's efficiency efforts. Because BED does not have a monetary performance award, the determination of targets completes the DRP process with regard to BED's performance goals.

For BED, the modeled expected savings inform the establishment of QPI targets. Based on the modeled expected savings, BED proposed electric-efficiency and TEPF QPI targets for the 2018-2020 performance period. For electric-efficiency activities, the targets represent the following QPIs: (a) QPI 1 - total resource benefits, including a lifetime savings component; (b) QPI 2 - annual incremental MWh savings; (c) QPI 3- summer peak demand savings; (d) QPI 4 - winter peak demand savings; and (e) QPI 5 - lifetime MWh savings. For TEPF activities, the targets represent: (a) QPI 1 - annual incremental MMBtu savings; and (b) QPI 2 - residential single family comprehensiveness.

BED also filed proposed electric-efficiency and TEPF targets for minimum performance requirements. For electric-efficiency activities, the targets represent the following minimum performance requirements: (a) QPI 7 - equity for all electric ratepayers; (b) QPI 8 - equity for residential ratepayers; (c) QPI 9 - equity for low-income customers; (d) QPI 10 - commercial customer equity; and (e) QPI 11 - administrative efficiency. TEPF activities include one target for minimum performance requirements: QPI 3 - residential customer equity.

The Department supported the proposed targets for QPIs and minimum performance requirements. No other participant filed comments on these targets.

Discussion

We find that the proposed QPI targets represent a reasonable level of savings that can be expected over the 2018-2020 performance period given the modeled expected savings of the

resource-acquisition budgets approved in the July 7th Order. The modeling of the electric expected savings assumed that 10% of the resource-acquisition budget would maximize lifetime MWh savings and assumed that the remainder of the 2018-2020 portfolio is well balanced and offers markets, programs, and measures that provide customer benefits and that contribute to many policy and performance objectives. The proposed electric and TEPF targets are intended to push BED to innovate while responsibly using ratepayer resources to encourage adoption of efficient technologies.

Although we are approving allocated and reserve budgets for BED, the modeling of the TEPF expected savings did not include the reserve portion of BED's resource-acquisition budgets. Any annual plans during the 2018-2020 performance period that include spending of the reserve budget shall include proposed revised TEPF QPI targets to reflect the increased level of spending.

For the 2018-2020 performance period, we approve the following QPI targets for BED as set forth in the table below. A complete description of the QPIs, including targets and weighting factors, are contained in Appendix C to this Order.

QPI Targets for BED		
QPI #	QPI Description	2018-2020 Total
<i>Electric QPIs</i>		
QPI 1	Total resource benefits, including lifetime savings	\$19,940,354 215,120 MWh
QPI 2	Annual incremental MWh savings	19,362 MWh
QPI 3	Cumulative summer peak demand savings	2.27 MW
QPI 4	Cumulative winter peak demand savings	3.0 MW
QPI 5	Business comprehensiveness of savings	Improve savings 10% or more
QPI 6	Long-term market transformation	25 buildings or 350,000 square feet
<i>TEPF QPIs</i>		
QPI 1	Annual incremental MMBtu savings	955 MMBtu
QPI 2	Residential single-family comprehensiveness	34% average air reduction leak per project and 16% of projects with both shell and heating systems installed

Minimum performance requirements ensure that efficiency activities are provided to all customers. For the 2018-2020 performance period, we approve the following BED targets for minimum performance requirements as set forth in the table below. A complete description of the minimum performance requirements, including targets, are contained in Appendix C to this Order.

BED Targets for Minimum Performance Targets		
QPI #	QPI Description	2018-2020 Total
<i>Electric Minimum Performance Targets</i>		
QPI 7	Equity for all ratepayers	1.2 benefit/cost ratio
QPI 8	Equity for residential ratepayers	70% minimum spending
QPI 9	Equity for low-income customers	70% minimum spending
QPI 10	Equity for small business customers	225 business accounts
QPI 11	Administrative efficiency	Report on tracking milestones by July 31, 2018
<i>TEPF Minimum Performance Requirement</i>		
QPI 3	equity for residential customers	\$210,055 minimum spending

C. VGS Targets for QPIs and Minimum Performance Requirements

For VGS, we are establishing targets for QPI and minimum performance requirements. For the 2018-2020 performance period, VGS does not have a monetary performance award associated with meeting its QPI targets. The corresponding QPI weighting factors (approved in the previous stage of the DRP proceeding) and the minimum performance requirements help to direct the focus of VGS's efficiency efforts. Because VGS does not have a monetary performance award, the determination of targets completes the DRP process with regard to VGS's performance goals.

For VGS, the modeled expected savings inform the establishment of QPI targets. Based on the modeled expected savings, VGS proposed QPI targets for the 2018-2020 performance period. The targets represent the following QPIs: (a) QPI 1 - annual incremental Mcf savings; (b) QPI 2 - lifetime natural gas savings, including a present-worth goal of lifetime natural gas avoided costs and a lifetime savings goal; (c) QPI 3 – peak-day natural gas savings; (d) QPI 4 –

residential single-family comprehensiveness; (e) QPI 5 – long-term market transformation; (f) QPI 6 – business comprehensiveness of savings.

VGS also filed proposed targets for minimum performance requirements. The targets represent the following minimum performance requirements: (a) QPI 7 - equity for all natural gas ratepayers; (b) QPI 8 - equity for residential ratepayers; (c) QPI 9 - equity for low-income customers; (d) QPI 10 – equity for small business customers; (e) QPI 11 - administrative efficiency; (f) QPI 12 – total resource benefits; and (g) QPI 13 – Addison County participation.

The Department supported the proposed targets for QPIs and minimum performance requirements. No other participant filed comments on these targets.

Discussion

We find that the proposed QPI targets represent a reasonable level of savings that can be expected over the 2018-2020 performance period given the modeled expected savings of the resource-acquisition budgets approved in the July 7th Order. The modeling of the natural gas expected savings assumed that the 2018-2020 portfolio is well balanced and offers markets, programs, and measures that provide customer benefits and that contribute to many policy and performance objectives. In addition, the modeling placed a limit on the expected savings of large commercial projects to address the concern that large commercial projects can distort the resulting savings goals. The proposed QPI targets are intended to push VGS to innovate while responsibly using ratepayer resources to encourage adoption of efficient technologies.

For the 2018-2020 performance period, we approve the following QPI targets for VGS as set forth in the table below. A complete description of the QPIs, including targets and weighting factors, are contained in Appendix D to this Order.

QPI Targets for VGS		
QPI #	QPI Description	2018-2020 Total
QPI 1	Annual incremental Mcf savings	192,599 Mcf
QPI 2	Lifetime natural gas savings	\$33,897,797 3,195,212 Mcf
QPI 3	Peak day natural gas savings	898 Mcf
QPI 4	Residential single family comprehensiveness	30% of audits converted to measure installations and 70% of identified

		measures installed by customers
QPI 5	Long-term market transformation	Offer 3 energy efficiency trainings for contractors
QPI 6	Business comprehensiveness of savings	Minimum of measures installed: 10% control-related; 20% heating systems; 10% process-related; and 30% shell-related

Minimum performance requirements ensure that efficiency activities are provided to all customers. For the 2018-2020 performance period, we approve the following VGS targets for minimum performance requirements as set forth in the table below. A complete description of the minimum performance requirements, including targets, are contained in Appendix D to this Order.

VGS Targets for Minimum Performance Targets		
QPI #	QPI Description	2018-2020 Total
QPI 7	Equity for all ratepayers	1.2 benefit/cost ratio
QPI 8	Equity for residential ratepayers	\$4,291,087 minimum spending
QPI 9	Equity for low-income customers	\$116,474 minimum spending
QPI 10	Equity for small business customers	30% of installed measures are customer rate G1 or G2
QPI 11	Administrative efficiency	Report on tracking milestones by July 31, 2018
QPI 12	Total resource benefits	Status update by July 31, 2018
QPI 13	Addison County participation	30% participation in Addison County

XI. CONCLUSION

In this Order, the Commission approves the DSS budgets proposed by the state's three EEU's – Efficiency Vermont, BED, and VGS. In addition, the Commission approves 20-year and 10-year forecasts of expected savings, an evaluation plan and budgets, Fiscal Agent and audit budgets, other program administrative budgets, and three-year targets for QPIs and minimum performance requirements.

As described in detail above, the DSS budgets and other supporting program budgets approved in this Order will result in significant long-term benefits to Vermont ratepayers, and will enable the EEUs to acquire all reasonably available, cost-effective energy efficiency. The performance targets are intended to push the EEUs to innovate while responsibly using ratepayer resources to encourage adoption of efficient technologies.

XII. ORDER

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the Vermont Public Utility Commission (“Commission”) that:

1. Efficiency Vermont’s and Burlington Electric Department’s (“BED”) 20-year forecasts of electric savings and 10-year forecasts of thermal-energy-and-process-fuels (“TEPF”) savings are approved, and are shown in Appendix A to this Order.
2. Vermont Gas Systems, Inc.’s (“VGS”) 20-year forecast of natural gas savings is approved, and is shown in Appendix A to this Order.
3. The three-year TEPF estimated resource-acquisition budgets for BED shall be those approved in this Order.
4. The three-year electric and TEPF development and support service budgets, including budget categories, for Efficiency Vermont and BED shall be those approved in this Order.
5. The three-year natural gas development and support service budgets, including budget categories, for VGS shall be those approved in this Order.
6. The 20-year electric development and support service budgets for Efficiency Vermont and BED and the 20-year natural gas development and support service budgets for VGS shall be those shown in Appendix B to this Order.
7. The 10-year TEPF development and support service budgets for Efficiency Vermont and BED shall be those shown in Appendix B to this Order.
8. The Vermont Department of Public Service’s Evaluation Plan is approved. The three-year evaluation budgets shall be those approved in this Order.
9. The three-year budgets for the Energy Efficiency Utility (“EEU”) Fiscal Agent, EEU fund audits, the independent audit of EEU savings claims and program cost-effectiveness, the

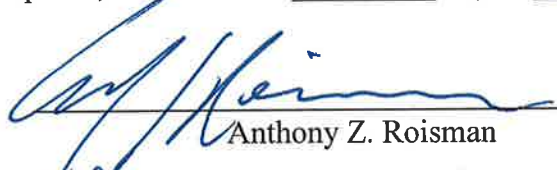
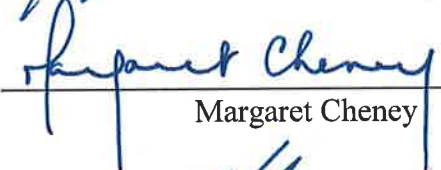

statewide TEPF Information Clearinghouse, and the property-assessed clean energy program shall be those approved in this Order.

10. The “super-stretch” target levels for the electric-efficiency and TEPF quantifiable performance indicators (“QPIs”) for Efficiency Vermont for the 2018-2020 performance period shall be those approved in this Order.

11. The electric-efficiency and TEPF QPIs and minimum performance requirements for BED for the 2018-2020 performance period, including weighting factors, shall be those shown in Appendix C to this Order.

12. The natural gas efficiency QPIs and minimum performance requirements for VGS for the 2018-2020 performance period, including weighting factors, shall be those shown in Appendix D to this Order.

Dated at Montpelier, Vermont this 12th day of October, 2017.

)	
Anthony Z. Roisman)	Public Utility
)	
Margaret Cheney)	Commission
)	
Sarah Hofmann)	of Vermont

OFFICE OF THE CLERK

Filed: October 12, 2017

Attest: Julith C. Whitney
Clerk of the Commission

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) or any apparent errors, in order that any necessary corrections may be made. (E-mail address: puc.clerk@vermont.gov)

APPENDIX A**Resource Acquisition Expected Savings**

(includes expected savings from resource-acquisition activities funded by the energy efficiency charge (EEC) and by thermal-energy-and-process-fuel (TEPF) revenues)

	Efficiency Vermont			BED			VGS EEC (Mcf)
	EEC (MWh)	TEPF (MW)	TEPF (mmBtu)	EEC (MWh)	TEPF (MW)	TEPF (mmBtu)	
2018	134,798	16,665	140,064	6,414	0.734	320	63,976
2019	125,011	15,601	137,993	6,565	0.778	315	64,985
2020	115,260	15,914	131,121	6,383	0.759	320	63,638
2021	101,319	13,907	126,076	6,001	0.720	315	62,411
2022	99,229	13,495	122,733	5,979	0.725	320	61,189
2023	94,129	12,041	118,471	5,935	0.729	315	59,981
2024	94,457	12,147	116,406	5,828	0.724	320	58,799
2025	93,748	11,990	115,647	5,719	0.705	315	57,655
2026	93,078	12,157	113,638	5,832	0.681	320	56,519
2027	92,153	12,135	112,052	5,706	0.658	315	55,410
2028	92,153	12,135		5,798	0.795		54,333
2029	90,725	12,081		5,680	0.747		53,259
2030	90,512	12,282		5,842	0.811		52,212
2031	89,692	12,462		5,660	0.762		51,185
2032	89,738	12,752		5,448	0.731		50,183
2033	89,669	12,763		5,398	0.832		49,203
2034	89,271	12,631		5,334	0.810		48,236
2035	88,663	12,558		5,220	0.781		47,287
2036	88,127	12,625		4,926	0.776		46,360
2037	87,298	12,364		4,815	0.760		45,455

APPENDIX B**Development & Support Services Budgets**

(includes energy efficiency charge (EEC) funds and thermal-energy-and-process-fuels (TEPF) funds)

	Efficiency Vermont EEC	Efficiency Vermont TEPF		BED EEC	BED TEPF		VGS EEC
2018	\$3,841,240	\$786,760		\$191,677	\$10,355		\$259,757
2019	\$3,838,169	\$786,131		\$203,561	\$10,700		\$267,135
2020	\$3,785,464	\$775,336		\$203,561	\$10,900		\$269,536
3-Year Total	\$11,464,873	\$2,348,227		\$598,799	\$31,955		\$796,428
2021	\$3,662,043	\$750,057		\$203,561	\$10,900		\$269,536
2022	\$3,908,387	\$800,513		\$203,561	\$10,900		\$269,536
2023	\$4,017,366	\$822,834		\$203,561	\$10,900		\$269,536
2024	\$3,886,143	\$795,957		\$203,561	\$10,900		\$269,536
2025	\$4,147,344	\$849,456		\$203,561	\$10,900		\$269,536
2026	\$4,263,212	\$873,188		\$203,561	\$10,900		\$269,536
2027	\$4,123,938	\$844,662		\$203,561	\$10,900		\$269,536
2028	\$4,401,241			\$203,561			\$269,536
2029	\$4,523,998			\$203,561			\$269,536
2030	\$4,376,590			\$203,561			\$269,536
2031	\$4,670,742			\$203,561			\$269,536
2032	\$4,800,969			\$203,561			\$269,536
2033	\$4,644,016			\$203,561			\$269,536
2034	\$4,956,760			\$203,561			\$269,536
2035	\$5,094,706			\$203,561			\$269,536
2036	\$4,928,540			\$203,561			\$269,536
2037	\$5,259,793			\$203,561			\$269,536
10-Year Total		\$8,084,894			\$108,255		
20- Year Total	\$39,473,306			\$4,059,336			\$5,378,540

Case No. EEU-2016-03
Appendix C

Table 1: BED 2018-2020 Electric-Efficiency Performance Indicators

QPI#	Title	Performance Indicator	Target	Description	Weight	Form of Verification	Entity Responsible for Verification
<i>Quantifiable Performance Indicators</i>							
1	Total Resource Benefits	(a) Present worth of lifetime electric, fossil, and water benefits	\$19,940,354	Encourage EEUs to design and implement efficiency initiatives that will maximize the lifetime electric, fossil fuel, and water benefits	33%	Annual Verification Process	Department of Public Service
		(b) Lifetime electric Mwh savings	215,120 MWh				
2	Electricity Savings	Annual incremental net MWh expected savings	19,362 MWh	Encourage BED to design and implement efficiency initiatives that will maximize annual incremental electrical energy savings	25%	Annual Verification Process	Department of Public Service
3	Summer Peak Demand Savings (MW)	Cumulative net summer peak demand expected savings	2.27 MW	Encourage BED to design and implement efficiency initiatives that will maximize the capacity reduction coincident with peak summer demand	17%	Annual Verification Process	Department of Public Service
4	Winter Peak Demand Savings (MW)	Cumulative net winter peak demand expected savings	3 MW	Encourage BED to design and implement efficiency initiatives that will maximize the capacity reduction coincident with peak winter demand	14%	Annual Verification Process	Department of Public Service
5	Business Comprehensiveness of Savings	Increase the average kWh savings for commercial-sector participants over the 2018-2020 period	Improve 2018-2020 commercial-sector average depth of savings by 10% or more when compared to 2015-2017 average commercial-sector savings.	Ensure that energy efficiency initiatives are designed and implemented to acquire comprehensive savings	6%	Tracking System	Department of Public Service
6	Long-term Market Transformation	Provide technical assistance and data analysis services in order to ensure benchmarking of a specific number (and/or square feet) of commercial buildings by end of the performance period	25 buildings or 350,000 square feet	Encourage BED to design and implement efficiency initiatives that maximize market transformation	5%	Tracking System	Department of Public Service
<i>Minimum Performance Requirements</i>							
7	Minimum Electric Benefits (Equity for all Electric Ratepayers)	Total electric benefits divided by total costs	Equal or greater than 1.2 benefit/cost ratio	Ensure equity for all BED customers by ensuring that the overall electric benefits are greater than the costs incurred to implement and evaluate the EEU.	minimum requirement	Tracking System	Department of Public Service
8	Equity for Residential Ratepayers	A minimum level of overall efficiency spending dedicated to residential customers	A minimum of 70% of residential-sector share of total resource-acquisition spending in the residential sector.	Ensure equity for all residential customers by ensuring that a minimum level of overall efficiency efforts, as reflected in spending, will be dedicated to residential customers	minimum requirement	Tracking System	Department of Public Service
9	Equity for Low-income Customers	A minimum level of overall efficiency spending dedicated to low-income customers	A minimum of 70% of the low-income sector share of total resource-acquisition spending on low-income services.	Ensure equity for all low-income customers by ensuring that a minimum level of overall efficiency efforts, as reflected in spending, will be dedicated to low-income households	minimum requirement	Tracking System	Department of Public Service
10	Equity for Small Business Customers	Number of total non-residential premises with annual electric use 40,000 kWh/yr. or less participating in energy efficiency programs.	225	Ensure that a minimum level of overall efficiency efforts, as reflected in participation, will be dedicated to small business accounts	minimum requirement	Tracking System	Department of Public Service
11	Administrative Efficiency	Meet determined milestones on schedule to define and track administrative costs	Meet determined milestones on schedule including: (a) Defining all administrative costs and providing the costs for the 2015-2017 period; (b) By July 31, 2018, submit a proposal on how these costs will be tracked and reported, including a metric on the ratio of incentive costs and total administrative costs as a percent of total budget for the current performance period.	Define and track administrative costs and ultimately require the program administrator to assess operations to ensure delivery of services in a cost-effective manner that maximizes ratepayer value.	minimum requirement	Tracking System	Department of Public Service

Case No. EEU-2016-03
Appendix C

Table 2: BED 2018-2020 TEPF Performance Indicators

QPI#	Title	Performance Indicator	Target	Description	Weight	Form of Verification	Entity Responsible for
<i>Quantifiable Performance Indicators</i>							
1	Thermal & Mechanical Energy Efficiency Savings (Residential and Commercial)	Incremental net MMBTU savings (3Yr total)	955	Encourage BED to design and implement efficiency initiatives that will maximize unregulated thermal energy savings	60%	Tracking System	Department of Public Service
2	Residential Single Family Comprehensiveness	(a) Average air leakage reduction per project	(a) 34% reduction per project	Ensure that energy efficiency initiatives are designed and implemented to acquire comprehensive savings	40%	Tracking System	Department of Public Service
		(b) Percent of projects with both shell and heating system measures installed.	(b) 16% of premises				
<i>Minimum Performance Requirements</i>							
3	Equity for Residential Customers	A minimum of 70% of the residential-sector share of total resource-acquisition spending be in the residential sector	\$210,055	Ensure that a minimum level of overall efficiency efforts, as reflected in spending, will be dedicated to residential customers	minimum requirement	Tracking System	Department of Public Service

Case No. EEU-2016-03
Appendix D

VGS 2018-2020 Performance Indicators

QPI#	Title	Performance Indicator	Target	Description	Weight	Form of Verification	Entity Responsible for Verification
<i>Quantifiable Performance Indicators</i>							
1	Annual Incremental Mcf Savings	Annual incremental net Mcf expected savings	192,599 Mcf	Encourage EEU to design and implement efficiency initiatives that will maximize natural gas savings	25%	Annual Verification Process	Department of Public Service
2	Lifetime Natural Gas Savings	a. Present worth of lifetime natural gas avoided costs	\$33,897,797	Encourage EEU to design and implement efficiency initiatives that will maximize lifetime natural gas benefits	15%	Annual Verification Process	Department of Public Service
		b. Lifetime Mcf savings	3,195,212 Mcf		15%		
3	Peak Day Natural Gas Savings	Peak day incremental expected savings	898 Mcf	Encourage EEU to design and implement efficiency initiatives that will maximize the capacity reduction coincident with peak day demand	15%	Annual Verification Process	Department of Public Service
4	Residential Single Family Comprehensiveness	(a) Percent of home energy audits converted to a measure installation within 12 months	30%	Ensure that energy efficiency initiatives are designed and implemented to achieve comprehensiveness of savings	10%	Tracking System	Department of Public Service
		(b) Percent of all cost-effective measures as well as those measures recommended by the audit and installed by the customer within 12 months.	70%		10%		
5	Long-term Market Transformation	Offer energy efficiency training for contractors	one per year	Encourage EEU to design and implement efficiency initiatives that maximize market transformation	5%	Tracking System	Department of Public Service
6	Business Comprehensiveness of Savings	Diversity of measures implemented in commercial retrofit projects	minimum of measures installed during the prior 12 months shall be: 10% control-related; 20% heating systems, heat recovery, or domestic hot water systems; 10% process-related; and 30% shell-related	Ensure that energy efficiency initiatives are designed and implemented to achieve comprehensiveness of savings	5%	Tracking System	Department of Public Service
<i>Minimum Performance Requirements</i>							
7	Equity for all Natural Gas Ratepayers	Total natural gas energy efficiency benefits divided by total costs	Equal or greater than 1.2 cost/benefit ratio	Ensure that the overall natural gas benefits are greater than the costs incurred to implement and evaluate the VGS efficiency programs	Minimum Requirement	Tracking System	Department of Public Service
8	Equity for Residential Ratepayers	A minimum of 70% of the residential-sector share of total resource-acquisition spending in the residential sector	\$4,291,087	Ensure that a minimum level of overall efficiency effort, as reflected in spending, will be dedicated to residential customers	Minimum Requirement	Tracking System	Department of Public Service
9	Equity for Low-Income Customers	A minimum of 70% of the low-income-sector share of total resource-acquisition spending on low-income services	\$116,474	Ensure that a minimum level of overall efficiency efforts, as reflected in spending, will be dedicated to low-income customers	Minimum Requirement	Tracking System	Department of Public Service
10	Equity for Small Business Customers	Percent of commercial (non-residential) installed end uses that are classified as Rate G1 or G2 (use 600 Mcf/yr. or less)	30%	Ensure that a minimum level of overall efficiency efforts, as reflected in participation, will be dedicated to small commercial accounts	Minimum Requirement	Tracking System	Department of Public Service
11	Administrative Efficiency	Meet determined milestones on schedule, including: (a) Defining all administrative costs, incentive and other costs; and (b) By July 31, 2018, submit a proposal on how these costs will be tracked and reported, including a metric on the ratio of incentive costs to non-incentive costs and total administrative costs as a percent of total budget for the current performance period.	Track the ratio of incentive to non-incentive costs and report as a percent of total budget by July 31, 2018	Encourage VGS to continually assess its operations to continue to deliver services that maximize ratepayer value	Minimum Requirement	Tracking System	Department of Public Service
12	Total Resource Benefits	In consultation with the Department, file a status update on the feasibility and cost-benefit analysis of tracking water and delivered fuel resource benefits	Status update by July 31, 2018	Encourage VGS to design and implement efficiency initiatives that will maximize the lifetime benefits	Minimum Requirement	Tracking System	Department of Public Service
13	Addison County Participation	Meet minimum energy efficiency program participation rate for customers in Addison County	Achieve 30% energy efficiency participation in Addison County by 2020	Maximize the percent of Addison County customers that benefit from VGS energy efficiency programs	Minimum Requirement	Tracking System	Department of Public Service

PSB Case No. EEU-2016-03 - SERVICE LIST

Parties:

Jeanne Elias, Esq.
Vermont Department of Public Service
112 State Street, 3rd Floor
Montpelier, VT 05620-2601
jeanne.elias@vermont.gov

(for Vermont Department of Public Service)

Melissa Bailey
Vermont Public Power Supply Authority
P.O. Box 126
5195 Waterbury-Stowe Road
Waterbury Center, VT 05677
mbailey@vppsa.com

Victoria J. Brown, Esq.
Vermont Electric Cooperative, Inc.
42 Wescom Road
Johnson, VT 05656
vbrown@vermontelectric.coop

Brian Buckley
Northeast Energy Efficiency Partnerships
bbuckley@neep.org

Christopher Burns
City of Burlington Electric Department
cburns@burlingtonelectric.com

Samantha Caputo
Northeast Energy Efficiency Partnerships
SCaputo@NEEP.org

Brian Cotterill
Vermont Department of Public Service
brian.cotterill@vermont.gov

Neil E. Curtis
Navigant
neil.curtis@navigant.com

William Driscoll
Associated Industries of Vermont
wdriscoll@aivt.org

Shawn Enterline
Green Mountain Power Corporation
shawn.enterline@greenmountainpower.com

Deena Frankel
Vermont Electric Power Company
dfrankel@velco.com

Toben Galvin
Navigant
255 South Champlain Street
Suite 10
Burlington, VT 05401
toben.galvin@navigant.com

James Gibbons
City of Burlington Electric Department
585 Pine Street
Burlington, VT 05401
jgibbons@burlingtonelectric.com

Brian Gray
Vermont Gas Systems, Inc.
bgray@vermontgas.com

Carole Hakstian
Vermont Energy Investment Corporation
chakstian@veic.org

Lauren Hammer
Vermont Gas Systems, Inc.
lhammer@vermontgas.com

Lauren Hierl
Vermont Conservation Voters
info@vermontconservationvoters.org

Mick Hilbert
Vermont Energy Investment Corporation
mhilbert@veic.org

Karen Horne
Vermont Gas Systems, Inc.
khorne@vermontgas.com

Kelly Launder
Vermont Department of Public Service
kelly.launder@vermont.gov

Keith Levenson
Vermont Department of Public Service
keith.levenson@vermont.gov

Sandra Levine, Esq.
Conservation Law Foundation
15 East State Street, Suite 4
Montpelier, VT 05602
slevine@clf.org

Thomas Lyle
City of Burlington Electric Department
tlyle@burlingtonelectric.com

James Massie
Vermont Energy Investment Corporation
jmassie@veic.org

Johanna Miller
Vermont Natural Resources Council
jmiller@vnrc.org

Barry Murphy
Vermont Department of Public Service
barry.murphy@vermont.gov

Adam Necrason
Necrason Group
adam@necrasongroup.com

Morris L. Silver, Esq.
Law Offices of Morris L. Silver, Esq.
P.O. Box 606
Benson, VT 05731-0606
mlsilver@sover.net

Eileen Simollardes
Vermont Gas Systems, Inc.
85 Swift Street
South Burlington, VT 05403
esimollardes@vermontgas.com

Robert Stephenson
Vermont Energy Investment Corporation
rstephenson@veic.org

Melissa Stevens
Green Mountain Power Corporation
melissa.stevens@greenmountainpower.com

Matthew J. Walker
Vermont Energy Investment Corporation
mjwalker@veic.org

Ben Walsh
Vermont Public Interest Research Group
bwalsh@vpirg.org

David C. Westman
Efficiency Vermont - Vermont Energy Investment Corporation
128 Lakeside Avenue, Suite 401
Burlington, VT 05401
dwestman@veic.org

Michael Wickenden
michael.wickenden@gmail.com

Sarah Wolfe
Vermont Public Interest Research Group
swolfe@vpirg.org

Paul Zabriskie
Capstone Community Action
20 Gable Place
Barre, VT 05641
paulz@capstonevt.org